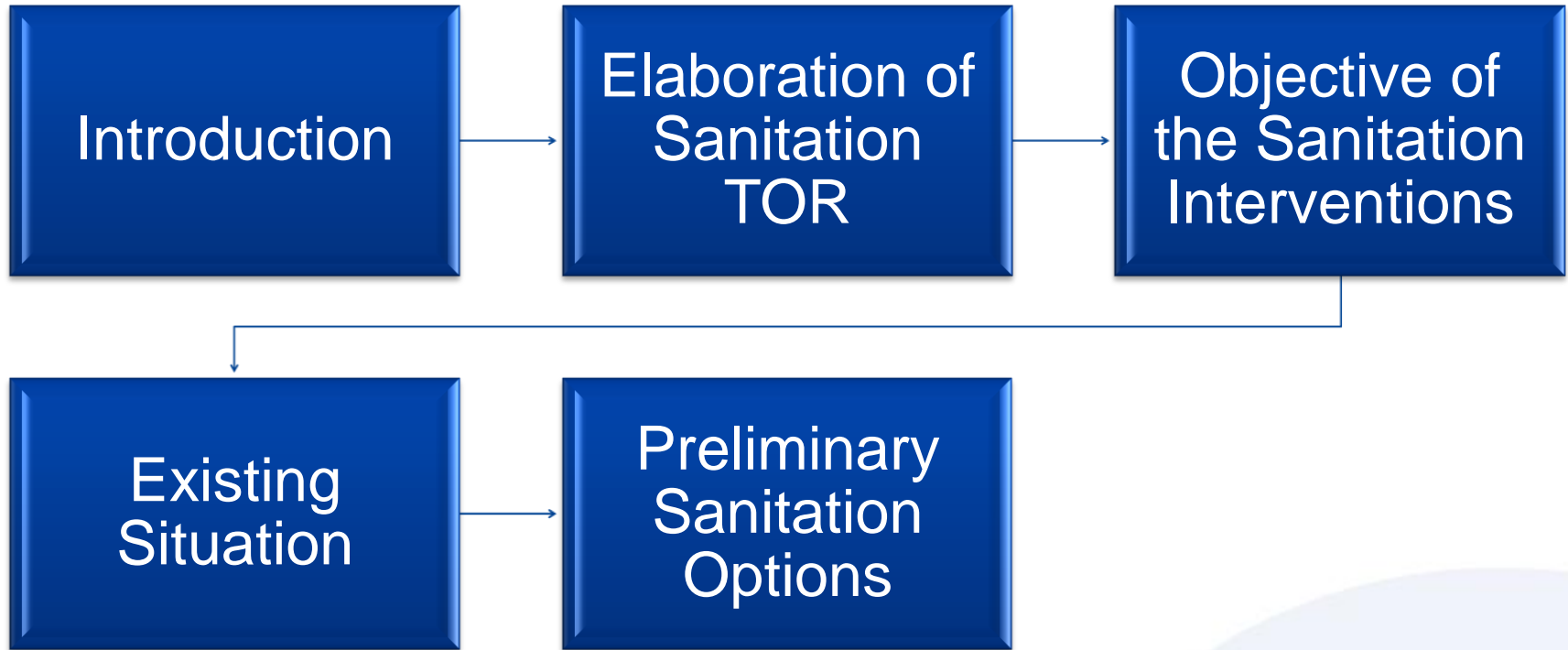


MTWARA SUSAN WORKSHOP

**Presentation of Sanitation in the 7 Towns Urban
Upgrading Programme**

7th September 2010

Structure of the Presentation



Introduction

- Pöyry Environment GmbH has been commissioned by the MoWI to undertake Feasibility Studies, Detailed Designs and Tender Documents Preparation For 7 Urban Towns.
- Areas of concern are improvement of water supply and sanitation services
- These towns are: **Babati, Bukoba, Kigoma, Lindi, Mtwara, Musoma and Sumbawanga**
- This being a SUSAN workshop, only the Sanitation part of the project shall be presented.
- Existing Sanitation Situation has been assessed for Kigoma, Lindi and Mtwara

Elaboration of Sanitation TOR

- At the Feasibility Study Stage: Elaboration of the viable economically justified staged development concept for the implementation of prioritised central wastewater sewerage and onsite sanitation measures
- At the Design Stage: Detailed design for the construction of new prioritised central sewer networks comprising house connections, main sewer lines, dry-well sewage pumping stations, force mains, wastewater treatment and sludge disposal facilities, electrical and mechanical equipment, hydraulic calculations, equipment including explanatory description, functional schematics, layout plans and execution drawings for networks and structures.

Objectives of the Sanitation Interventions



Objective

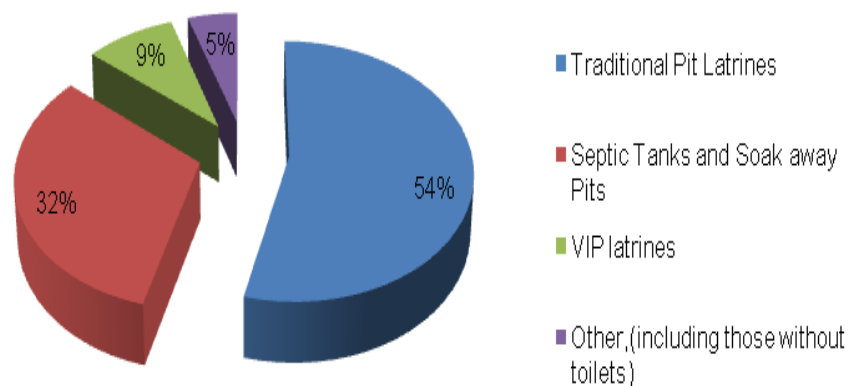
- Enhance and extend sewerage and sanitation facilities adequately in the seven towns

Existing Situation

Kigoma Town



Distribution of Onsite Wastewater and Excreta Disposal Methods by Percentages in Kigoma Municipality



Use of traditional pit latrines is common

Existing Situation

Kigoma Town



Open spillage of sewage into L. Tanganyika through Lubengera channel during the rainy season

Existing Situation

Kigoma Town



Sludge Disposal:

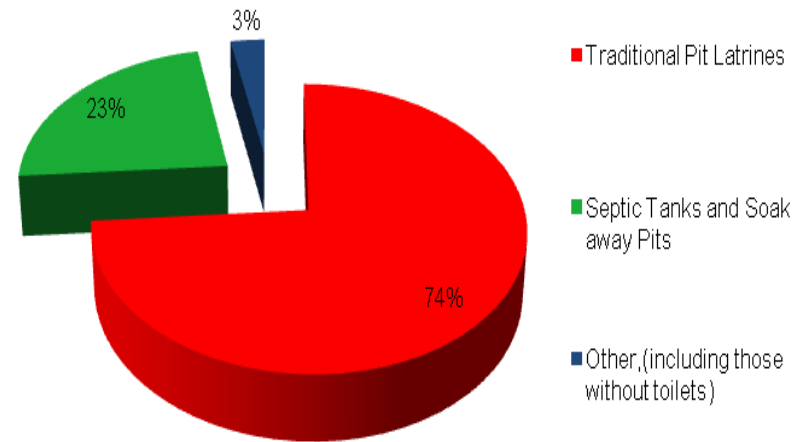
- Sludge is emptied by hand or using the municipal exhauster truck, shared between Kigoma, Kasulu and Kibondo towns.
- Sludge is disposed crudely without treatment at Mgonya.

Existing Situation

Lindi Town



Distribution in Percentage of Onsite Wastewater and Excrata Disposal Methods in Lindi Municipality



Use of traditional pit latrines is common

Existing Situation

Lindi Town



Covered pit where sludge was last emptied by hand. (at the bus terminus)

No exhauster truck, and households empty pits by hand. Local practice commonly termed as “KUTAPIISA”

Existing Situation

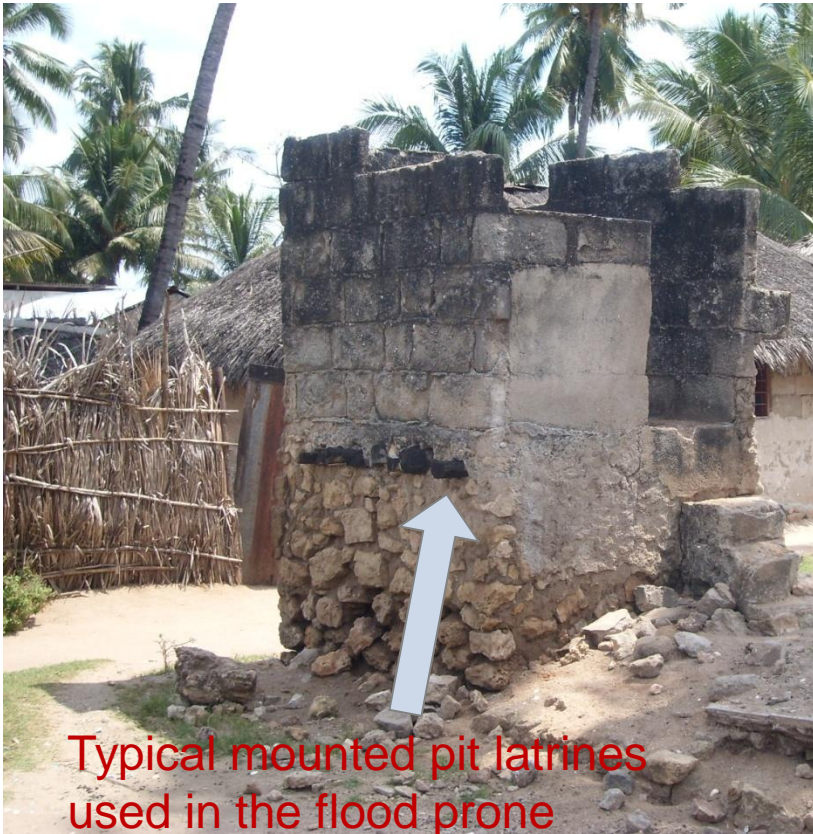
Lindi Town



Sludge Disposal: Where the Mtwara exhauster truck has been used, sludge is disposed crudely without treatment at Machole dump site.

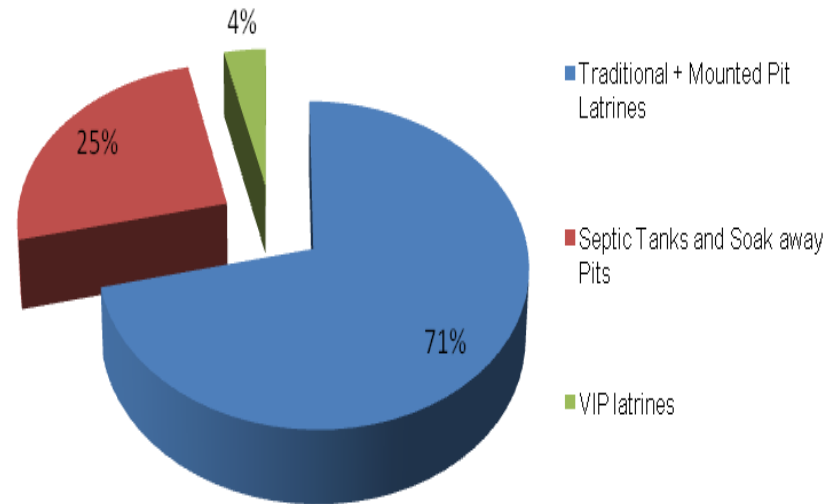
Existing Situation

Mtwara Town



Typical mounted pit latrines used in the flood prone Mikindani town

Distribution in Percentage of Onsite Wastewater and Excreta Disposal Methods in Mtwara/Mikindani Municipality



Use of traditional pit latrines is common

Existing Situation

Mtwara Town



- The council has one old exhauster truck in bad condition, that serves Mtwara and Lindi regions
- The truck cannot meet demand of all these regions

Overall Sanitation strategy

- The need for piped sewerage systems will be considered as part of overall sanitation strategy
- To minimise investment costs focus will be on installation of sewers in densely populated areas, high GWT and unfavourable ground conditions.
- Improvement on onsite sanitation and selection of **appropriate onsite sanitation technological options**

Key factors for consideration in developing sanitation options for the 7 towns

- Adequacy and acceptability of the existing sanitation methods
- Socio-economic profiles of the households
- Environmental benefits- in favor of healthy, safe and hygienic methods for excreta and waste water disposal
- Minimum pumping costs for sewerage systems where full gravity systems are not possible.



Possible Sanitation Options for Kigoma, Lindi, Mtwara towns

Kigoma

- Sewerage system initially covering the high density town area to prioritize protection of L.Tanganyika
- Waste Stabilization Ponds
- Communal septic tanks and
- VIP latrines for the peri urban areas

Lindi

- Communal septic tanks or offset pits
- VIP latrines for the peri urban areas
- 2 emptying trucks
- Sludge treatment facility

Mtwara

- Individual and Communal septic tanks or offset pits
- VIP latrines for the peri urban areas
- 2 emptying trucks
- Sludge treatment facility

..way forward

- ❖ Integration of more than one options is inevitable
- ❖ Sanitation is a social issue that should meet different socio cultural requirements of the society
- ❖ Developed options need to be discussed and confirmed with the representatives of the respective communities and authorities the 7 towns.
- ❖ Proposed treatment facilities would be based on waste stabilization ponds (WSP), especially where land is relatively cheap and available.
- ❖ Constructed wetlands would only be considered as tertiary treatment

Planned activities

Activity	Detail	Timeframe
Environmental Impact Assessment	The environmental impact assessment will part of the feasibility reports and submitted to MoWI.	September 2010 up to January 2011
Socio Economic Assessment	The Socio Economic Expert will visit the project towns and assess the socio economic situation	July 2010 up to December 2010
Financial and Economic Assessment	All proposed water development concepts and wastewater will be analyzed on financial and economic viability	September 2010 up to January 2011
Water Quality Survey	The consultant will assess the water quality data and take samples and analyze water quality of existing and proposed new sources	August 2010 up to January 2011
<i>Water Development Concepts and Waste Water Treatment Options</i>	<i>The consultant will develop water supply development concepts and options for wastewater treatment and sanitation measures</i>	<i>August 2010 up to December 2010</i>

A close-up, high-speed photograph of water splashing into a pool. The water is captured in mid-air, creating a dynamic and energetic scene. The background is dark, with some blurred light spots, possibly from a city at night. The overall mood is clean, fresh, and powerful.

Thank you for your attention

PÖYRY